

(ABSTRACT)

There are provided a phosphor and a light emitting device using the same, wherein in order to embody a desired wavelength of light, in a state where a first phosphor and a second phosphor are mixed in a light transmitting member, both of light excited by an excitation light source and the excitation light source are emitted to the outside and embody a white light source. Further, the first phosphor has a chemical formula of $\text{Sr}_{4-x}\text{Mg}_y\text{Ba}_z\text{Si}_2\text{O}_8:\text{Eu}_x^{2+}$ ($0 < x < 1$, $0 \leq y \leq 1$, $0 \leq z \leq 1$) and the second phosphor has a chemical formula of $\text{Sr}_{3-x}\text{SiO}_5:\text{Eu}^{2+}_x$ ($0 < x \leq 1$).